AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

Listing of Claims

1. (Currently Amended) A rectangular microwave applicator operating at a predetermined operating frequency, having first and second transverse dimensions and a longitudinal dimension, the dimensions being selected, in relation to said predetermined operating frequency, such that the applicator supports a first evanescent $TEy_{m;1}$ hybrid mode and a second propagating $TEy_{m-2k;1}$ hybrid mode, where m is an odd integer larger than 1 and k is a positive integer, and where m-$2k$ is positive, the applicator comprising two parallel feeding slots arranged in the ceiling of the applicator, connecting the applicator to a feeding waveguide, and further comprising an impedance transforming reactive element arranged centrally in the waveguide between the feeding slots.

2. (Previously Presented) An applicator as claimed in claim 1, wherein the evanescent mode has a decay distance approximately equal to the longitudinal dimension of the applicator.

3. (Cancelled)

4. (Currently Amended) An applicator as claimed in claim [[3]]1, wherein the feeding waveguide is a TE_{10} waveguide.

5. (Original) An applicator as claimed in claim 4, wherein each of the slots has the dimension 60x12 mm adapted for operation at the ISM frequency of 2450 MHz.

6. (Currently Amended) An applicator as claimed in claim [[3]]1, ~~further comprising~~ wherein the impedance transforming reactive element comprises a metal post arranged centrally in the waveguide between the feeding slots.

7. (Original) An applicator as claimed in claim 6, wherein the dimensions of said metal post are 10x20x12 mm in the x-, y- and z-directions adapted for operation at the ISM frequency of 2450 MHz.

8. (Previously Presented) An applicator as claimed in claim 1, comprising at least two metal rods or plates extending between opposite applicator walls.

9. (Previously Presented) An applicator as claimed in claim 1, comprising means for reducing unwanted propagation of LSM modes beneath a load placed under the applicator.

10. (Original) An applicator as claimed in claim 9, wherein said means for reducing unwanted propagation of LSM modes comprises a corrugated metal plate or metal profiles.

11. (Original) An applicator as claimed in claim 10, wherein said corrugated metal plate or said metal profiles have a height of 7 to 15 mm adapted for operation at the ISM frequency of 2450 MHz.

12. (Previously Presented) An applicator as claimed in claim 1, wherein the open end of the applicator is curved in a cylindrical shape.

13. (Previously Presented) A microwave heating arrangement, comprising at least two microwave applicators according to claim 1, said at least two applicators being arranged opposite each other in order to heat a load placed between said applicators.

14. (Original) An arrangement as claimed in claim 13, wherein said at least two applicators are displaced sideways one quarter of the applicator wavelength.

15. (Previously Presented) A microwave heating arrangement, comprising a plurality of microwave applicators according to claim 1, said applicators being arranged side by side in a cylindrical configuration.

16. (Original) An arrangement as claimed in claim 15, wherein each of the applicators has a cylindrically curved open end.

17. (Previously Presented) An applicator as claimed in claim 4, further comprising a metal post arranged centrally in the waveguide between the feeding slots.

18. (Previously Presented) An applicator as claimed in claim 5, further comprising a metal post arranged centrally in the waveguide between the feeding slots.

19. (Previously Presented) A microwave heating arrangement, comprising at least two microwave applicators according to claim 2, said at least two applicators being arranged opposite each other in order to heat a load placed between said applicators.

20. (Previously Presented) A microwave heating arrangement, comprising a plurality of microwave applicators according to claim 2, said applicators being arranged side by side in a cylindrical configuration.

<End of Claims Listing>